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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,426	01/23/2002	Robert Krupczak	00124-027001	7921
23483	7590	11/14/2005	EXAMINER	
WILMER CUTLER PICKERING HALE AND DORR LLP			SERRAO, RANODHI N	
60 STATE STREET			ART UNIT	
BOSTON, MA 02109			PAPER NUMBER	

2141

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/055,426

Applicant(s)

KRUPCZAK, ROBERT

Examiner

Ranodhi Serrao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 07 October 2005 have been fully considered but they are not persuasive.

2. The applicant argued that Kekic et al. fails to teach the limitations of claim 1, particularly it fails to rely on any form of dependency data to manage the elements of a distributed network. The examiner respectfully disagrees since Kekic states that, "Each of agent processes 121, 131, 141, and 151 monitors and controls the operation of the computer network element containing the agent process... by maintaining a data base of objects 122, 132, 142, and 152, respectively, called the Management Information Base (MIB)... Manager 115 maintains statistics that define the operation of network 100 in MIB 112." See col. 2, lines 36-49. The agent processes 121, 131, etc. are software agents executing on the first networked resource as stated in claim 1. Furthermore, the applicant argued that Kekic does not teach the collection or gathering of dependency data to determine the relationship between elements of the network. The examiner points out col. 23, lines 13-25 wherein Kekic describes the relationships of elements. Therefore the invention as claimed is clearly taught by Kekic.

3. In regard to claims 12 and 29, the applicant's amendment necessitates the combination of Kekic and Perttunen. The applicant argued that Perttunen fails to teach a root node any distance from the edge of the graphic representation. The examiner points to col. 7, lines 4-9, wherein Perttunen states "...adjacent the boundary may represent the leaf nodes of the tree." Kekic also has several figures showing these

limitations. See rejections below. Therefore Kekic and Perttunen teach the invention as claimed.

***Claim Rejections - 35 USC § 102***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-11 and 18-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Kekic et al. (6,272,537).

6. As per claim 1, Kekic et al. teaches a computer-based method for collecting dependency data (column 2, lines 36-49: wherein the network element contains the agent process, therefore the agent process has dependency on the element), the method including: collecting configuration data describing a first networked resource via a software agent executing on the first networked resource (column 2, lines 36-49); selecting dependency data from the configuration data (col. 49, lines 51-61), the dependency data specifying a dependency relationship between the first networked resource and a second networked resource (column 5, lines 8-14); and populating a repository with the dependency data (column 16, lines 3-18).

7. As per claim 2, Kekic et al. teaches the repository is stored on the first networked resource (column 5, lines 8-14).

8. As per claim 3, Kekic et al. teaches collecting dependency data from a plurality of networked resources including the first networked resource (column 2, lines 36-49); and

storing the dependency data in a repository centralized within a distributed systems management environment (column 16, lines 3-18).

9. As per claim 4, Kekic et al. teaches a computer-based method for communicating dependency data, including: gathering dependency data on a managed device via an agent on the managed device (column 16, lines 3-18); and offering access to a table that includes the dependency data, the access using a dependency interface for a distributed systems management protocol on the agent (column 34, lines 15-26).

10. As per claim 5, Kekic et al. teaches the distributed systems management protocol is an open standard (column 1, lines 35-43).

11. As per claim 6, Kekic et al. teaches the distributed systems management protocol is SNMP (column 2, lines 20-27).

12. As per claim 7, Kekic et al. teaches offering access includes a distributed systems management software application communicating across a network with the agent using the distributed systems management protocol (column 2, lines 36-49).

13. As per claim 8, Kekic et al. teaches the agent communicates with a distributed systems management software application using the distributed systems management protocol to raise a trap based on the dependency data (column 2, lines 36-49).

14. As per claim 9, Kekic et al. teaches a computer-based method for distributed systems management, including: monitoring a first managed device with a first agent, where the first agent gathers dependency data describing a dependency relationship between the first managed device and a second device (column 8, lines 21-34); and

starting a second agent to monitor the second device based on the dependency data (column 13, line 60-column 14, line 6).

15. As per claim 10, Kekic et al. teaches the first managed device is managed by a distributed systems management software application and the second device is also managed by the distributed systems management software application at the time the dependency data is gathered (column 8, lines 21-34).

16. As per claim 11, Kekic et al. teaches the first managed device is managed by a distributed systems management software application and the second device is not being managed by the distributed systems management software application at the time the dependency data is gathered (column 8, lines 21-34: wherein it is obvious to one of ordinary skill in the art to implement not managing the second device by the distributed system management software from reading the above reference).

17. As per claim 18, Kekic et al. teaches a computer-based method for collecting dependency data, the method including: gathering a plurality of dependency data on a plurality of networked resources via a plurality of software agents, such that a software agent runs on each networked resource in the plurality of networked resources, the dependency data including data specifying a dependency relationship between a first networked resource and a second networked resource in the plurality of networked resources (column 2, line 65-column 3, line 33); and adding a dependency entry to a central repository managed by a manager application, the dependency entry describing the dependency relationship (column 13, lines 57-67).

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18. As per claim 19, Kekic et al. teaches the first networked resource is in a plurality of network resources managed by the manager application (column 5, lines 8-14).

19. As per claim 20, Kekic et al. teaches after the gathering of the data specifying the dependency relationship and before the adding of the dependency entry to the central repository, the second networked resource is not in the plurality of network resources managed by the manager application (column 5, lines 8-14: wherein it is obvious to one of ordinary skill in the art to implement not putting the second networked resource in the plurality of network resources from reading the above reference).

20. As per claim 21, Kekic et al. teaches before the gathering of the data specifying the dependency relationship, the second networked resource is in the plurality of network resources managed by the manager application (column 5, lines 8-14).

21. As per claim 22, Kekic et al. teaches manager application offers a client application access to the central repository, the access using a distributed systems management protocol (column 6, lines 15-29).

22. As per claim 23, Kekic et al. teaches the distributed systems management protocol is SNMP (column 2, lines 20-27).

23. As per claim 24, Kekic et al. teaches an article comprising a machine-readable storage medium that stores executable instructions to collect dependency data, the instructions causing a machine to: collect configuration data describing a first networked resource via a software agent executing on the first networked resource (column 2, lines 36-49); select dependency data from the configuration data, the dependency data specifying a dependency relationship between the first networked resource and a

second networked resource (column 5, lines 8-14); and populate a repository with the dependency data (column 16, lines 3-18).

24. As per claim 25, Kekic et al. teaches the repository is stored on the first Networked resource (column 5, lines 8-14).

25. As per claim 26, Kekic et al. teaches instructions causing the machine to: collect dependency data from a plurality of networked resources including the first networked resource (column 2, lines 36-49); and store the dependency data in a repository centralized within a distributed systems management environment (column 16, lines 3-18).

26. As per claim 27, Kekic et al. teaches an article comprising a machine-readable storage medium that stores executable instructions to communicate dependency data, the instructions causing a machine to: gather dependency data on a managed device via an agent on the managed device (column 16, lines 3-18); and offer access to a table that includes the dependency data, the access using a dependency interface for a distributed systems management protocol on the agent (column 34, lines 15-26).

27. As per claim 28, Kekic et al. teaches an article comprising a machine-readable storage medium that stores executable instructions to manage distributed systems, the instructions causing a machine to: monitor a first managed device with a first agent, where the first agent gathers dependency data describing a dependency relationship between the first managed device and a second device (column 8, lines 21-34); and start a second agent to monitor the second device based on the dependency data (column 13, line 60-column 14, line 6).



***Claim Rejections - 35 USC § 103***

28. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

29. Claims 12-17 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perttunen (6,359,635) and Kekic.

30. As per claim 12, Perttunen teaches a computer-based method for formatting dependency information for display, including: providing a display area having a linear border (see Perttunen, column 6, lines 35-44); selecting a root managed device to display at a root distance from the border (see Perttunen, column 11, lines 11-27). But fails to teach a device residing in a distributed network and displaying a non-root managed device having a dependency relationship with the root managed device, where the dependency relationship has a length of at least one, the displaying including indenting the representation of the non-root managed device a predetermined distance away from the border, greater than the root distance and dependent upon the length. However, Kekic teaches a device residing in a distributed network (see Kekic, col. 1, lines 44-54) and displaying a non-root managed device having a dependency relationship with the root managed device (see Kekic, fig. 9D, item 305), where the dependency relationship has a length of at least one, the displaying including indenting the representation of the non-root managed device a predetermined distance away from the border, greater than the root distance and dependent upon the length (see Kekic,

fig. 37A, item 305). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Perttunen to a device residing in a distributed network and displaying a non-root managed device having a dependency relationship with the root managed device, where the dependency relationship has a length of at least one, the displaying including indenting the representation of the non-root managed device a predetermined distance away from the border, greater than the root distance and dependent upon the length in order to provide a new capability for creating a managed element template, called an element manager, for a management-enabled computer network element, such as a bridge, a workstation, or perhaps, a computer software application that is executing a computer system connected to the network (see Kekic, col. 5, lines 25-39).

31. As per claim 13, Perttunen and Kekic teach displaying further includes displaying a plurality of non-root managed devices in a tabular layout ordered according to a breadth-first search of devices joined by direct dependency relationships, the search beginning with the root managed device (see Perttunen, column 10, line 60-column 11, line 10 and column 14, lines 35-52).

32. As per claim 14, Perttunen and Kekic teach the breadth-first search is constrained to a predetermined depth (see Perttunen, column 10, line 60-column 11, line 10).

33. As per claim 15, Perttunen and Kekic teach displaying further includes displaying a plurality of non-root managed devices in a tabular layout ordered according to a depth-first search of devices joined by direct dependency relationships, the search

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beginning with the root managed device (see Perttunen, column 10, line 60-column 11, line 10 and column 14, lines 35-52).

34. As per claim 16, Perttunen and Kekic teach the depth-first search is constrained to a predetermined depth (see Perttunen, column 10, line 60-column 11, line 10).

35. As per claim 17, Perttunen and Kekic teach the predetermined distance for any such non-root managed device in the display area is determined by multiplying the length times a base predetermined distance (see Perttunen, column 10, lines 20-27).

36. As per claim 29, Perttunen teaches an article comprising a machine-readable storage medium that stores executable instructions to format dependency information for display, the instructions causing a machine to: provide a display area having a linear border (see Perttunen, column 6, lines 35-44); select a root managed device to display at a root distance from the linear border (see Perttunen, column 11, lines 11-27). But fails to teach a device residing in a distributed network and display a non-root managed device having a dependency relationship with the root managed device, where the dependency relationship has a length of at least one, the displaying including indenting the representation of the non-root managed device a predetermined distance away from the border, greater than the root distance and dependent upon the length. However, Kekic teaches a device residing in a distributed network (see Kekic, col. 1, lines 44-54) and display a non-root managed device having a dependency relationship with the root managed device (see Kekic, fig. 9D, item 305), where the dependency relationship has a length of at least one, the displaying including indenting the representation of the non-root managed device a predetermined distance away from the border, greater than the

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root distance and dependent upon the length (see Kekic, fig. 37A, item 305). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Perttunen to a device residing in a distributed network and display a non-root managed device having a dependency relationship with the root managed device, where the dependency relationship has a length of at least one, the displaying including indenting the representation of the non-root managed device a predetermined distance away from the border, greater than the root distance and dependent upon the length in order to provide a new capability for creating a managed element template, called an element manager, for a management-enabled computer network element, such as a bridge, a workstation, or perhaps, a computer software application that is executing a computer system connected to the network (see Kekic, col. 5, lines 25-39).

37. As per claims 30 and 31, Perttunen and Kekic teach the instructions causing a machine to display further include displaying a plurality of non-root managed devices in a tabular layout ordered according to a breadth-first search of devices joined by direct dependency relationships, the search beginning with the root managed device (see Perttunen, column 10, line 60-column 11, line 10 and column 14, lines 35-52).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within


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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ranodhi Serrao whose telephone number is (571)272-7967. The examiner can normally be reached on 8:00-4:30pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571)272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



RUPAL DHARIA  
SUPERVISORY PATENT EXAMINER